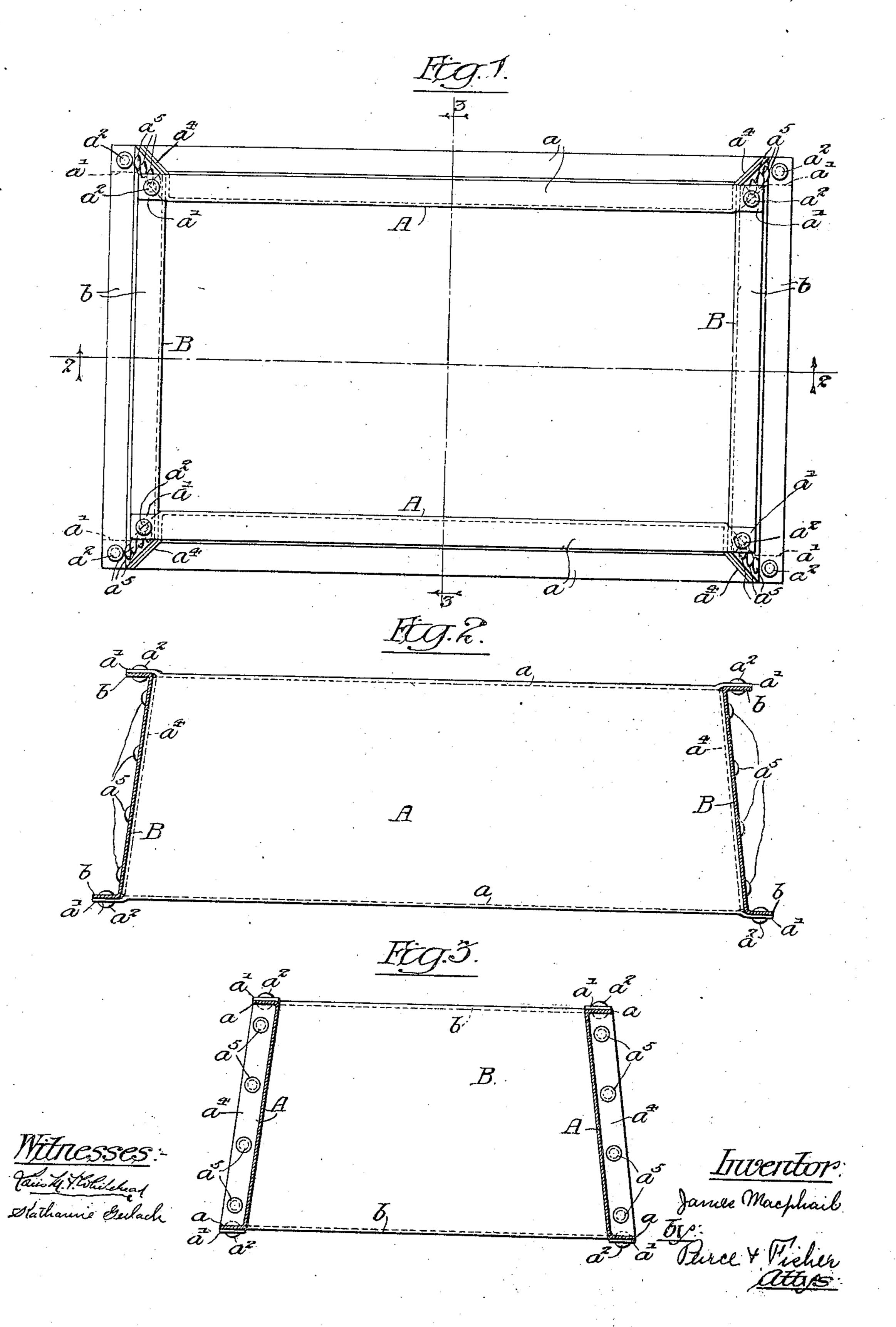
## J. MACPHAIL. JACKET FOR SAND MOLDS. APPLICATION FILED MAY 22, 1907.

952,679.

Patented Mar. 22, 1910.



## UNITED STATES PATENT OFFICE.

JAMES MACPHAIL, OF DAVENPORT, IOWA, ASSIGNOR TO PEIRCE, FISHER & CLAPP, OF CHICAGO, ILLINOIS, A FIRM.

## JACKET FOR SAND MOLDS.

952,679.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed May 22, 1907. Serial No. 374,991.

To all whom it may concern:

Be it known that I, James MacPhail, a citizen of the United States, residing at Davenport, in the county of Scott, State of 5 Iowa, have invented certain new and useful Improvements in Jackets for Sand Molds, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawing, 10 forming part of this specification.

The present invention has for its object to provide an improved metal jacket adapted to be set over sand molds after the flasks have been removed therefrom, the jacket 15 corresponding in outline to the shape of the flask and serving to hold the mold in posi-

tion during the casting operation.

Figure 1 is a plan view of a metal jacket embodying my invention. Fig. 2 is a view 20 in longitudinal section on line 2-2 of Fig. 1. Fig. 3 is a view in cross section on line

3—3 of Fig. 1. My improved jacket is formed of separate side and end plates of wrought metal so 25 shaped as to give a taper to the jacket. As shown, both the side plates A and the end plates B of the jacket are formed at top and bottom with the outwardly turned flanges a and b and, preferably, the flanges a of the 30 side plates A have end extensions a' which overlap the top and bottom flanges b of the end plates B and are riveted thereto as at a<sup>2</sup>. The side plates A are also formed at their ends with outwardly turned flanges  $a^4$ 35 which are riveted as at  $a^5$  to the extreme end portions of the end plates B.

My above described construction of the jacket is not only exceedingly strong and durable, but will be found to most effectively 40 resist the rough usage to which articles of this kind are subjected, and to resist, also, a tendency to buckle or warp under the heat to which they are exposed. At the same time, the jacket since formed of 45 wrought metal is of light weight and may be readily handled.

I wish it to be understood that the pre-

cise details of construction above set forth may be varied without departing from the spirit of the invention.

Having thus described my invention, what I claim as new, and desire to secure

by Letters Patent, is:--

1. A jacket for sand molds comprising inclined walls formed of separate side and 55 end plates of sheet metal having integral, outturned flanges at their top and bottom edges, said side and end plates being united at the corners of said jacket by outturned flanges on one of the adjacent plates se- 60 cured to the end portion of the other adjacent plate and by extensions on said top and bottom flanges that overlap and are secured to the top and bottom flanges of the adjacent plate.

2. A jacket for sand molds comprising inclined walls formed of separate side and end plates of sheet metal having integral, outturned flanges at their top and bottom edges, said side and end plates being united at each 70 corner of said jacket by an outturned flange on one adjacent plate riveted to the end portion of the other adjacent plate and by extensions on the top and bottom flanges of one adjacent plate overlapping and riveted 75 to the top and bottom flanges of the other adjacent plate, substantially as described.

3. A jacket for sand molds comprising inclined walls formed of sheet metal side and end plates having integral, outturned flanges 80 at their top and bottom edges, said side and end plates being united at the corners of said jacket by integral, outturned flanges on the ends of said side plates riveted to the end portions of said end plates and by ex- 85 tensions on the top and bottom flanges of said side plates overlapping and riveted to the top and bottom flanges of said end plates, substantially as described.

JAMES MACPHAIL.

Witnesses: HARRY L. CLAPP, KATHARINE GERLACH.